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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/041,685 03/13/98 CULLINAN

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IM62/1006

EXAMINER

BURNHART & BURNHART  
REGISTERED U.S. PATENT ATTORNEYS  
P O BOX 1828  
WHITEFISH MT 59937

PRINCE, F

ART UNIT

PAPER NUMBER

1724

8

DATE MAILED:

10/06/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	Application No. <b>09/041,685</b>	Applicant(s) <b>Cullinan et al.</b>
	Examiner <b>Fred Prince</b>	Group Art Unit <b>1724</b>
		

Responsive to communication(s) filed on Aug 24, 1999

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

#### Disposition of Claims

Claim(s) 1-9 is/are pending in the application.

Of the above, claim(s) 3-9 is/are withdrawn from consideration.

Claim(s) \_\_\_\_\_ is/are allowed.

Claim(s) 1 and 2 is/are rejected.

Claim(s) \_\_\_\_\_ is/are objected to.

Claims \_\_\_\_\_ are subject to restriction or election requirement.

#### Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on Mar 13, 1998 is/are objected to by the Examiner.

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## **DETAILED ACTION**

### ***Election/Restriction***

1. Applicant's election with traverse of claims 1 and 2 in Paper No. 6 is acknowledged. No grounds were given for the traversal. The requirement is still deemed proper and is therefore made FINAL. Applicants are respectfully requested to cancel claims 3-9 when responding to this office action.

### ***Priority***

2. Applicant has claimed priority under 35 U.S.C. 119(e) and 120, which is not permissible. However, applicant may claim priority under either 35 U.S.C. 119(e) or 120. If applicant desires priority under 35 U.S.C. 119(e) or 120 based upon a previously filed provisional application, specific reference to the earlier filed application must be made in the instant application. This should appear as the first sentence of the specification following the title, preferably as a separate paragraph. For a 119(e) priority claim, the reference should state, "This application claims the benefit of U.S. Provisional application...". For a priority claim under 35 U.S.C. 120, the reference should state "This application is a (continuation, continuation-in-part, etc.) of U.S. Provisional application...".

3. Acknowledgment is made of applicant's claim for foreign priority based on an application listed as "on file". It is noted, however, that applicant has not filed a certified copy of the application as required by 35 U.S.C. 119(b), nor does the oath or declaration identify the application number and filing date.

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***Oath/Declaration***

4. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It was not executed in accordance with either 37 CFR 1.66 or 1.68.

It claims priority under 35 U.S.C. <sup>119</sup>~~199(e)~~ and 120.

It does not identify the application number, filing date, and country of the foreign application.

***Drawings***

5. New formal drawings are required in this application because the Figures in the drawings are not labeled, in addition to the objections made by the draftsperson on form PTO-948. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the Patent and Trademark Office no longer prepares new drawings.

***Specification***

6. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

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7. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

8. Claims 1 and 2 are objected to because of the following informalities: The claims are not presented on a separate sheet; The lines are crowded too closely together, making reading and entry of amendments difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b). Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 2 recite the limitation "the eight vaned media structure," in lines 3 and 4 of the respective claims. There is insufficient antecedent basis for this limitation in the respective claims.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Brebion (see col. 2, lines 41-50; col. 3, lines 28-39; Figs. 6 and 13) or Couture (see col. 1, lines 46-53; col. 2, lines 48-63; Figs. 1 and 3). Either Brebion or Couture discloses an eight-vaned media structure for separating organic. Either Brebion or Couture is silent as to using induced vertical vortices and separating inorganic matter. It is submitted that induced vertical vortices are inherent to the media flow system since the water flowing through the channel would tend to produce eddies which impart an angular velocity to the fluid. With regard to separating inorganic matter, it is submitted that it is conventional in the art to use a porous media to separate inorganic matter from water, and therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the media to separate inorganic matter from the water. If a difference exists between claims 1 and 2 and either Brebion or Couture, it would reside in optimizing the elements of either Brebion or Couture. It would have been obvious to one of ordinary skill in the art to optimize the elements of either Brebion or Couture in order to separate matter from the water to be treated.

### *Conclusion*

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Pretorius et al. (4,208,284) disclose media using angular velocities to separate media.
- b. Coulthard (4,294,694) discloses an eight-vaned media structure.

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- c. Lang (4,724,593) discloses a media structure for treating water.
- d. Chiba (4,908,128) discloses a media structure for treating water.
- e. Chianh (5,690,819) discloses an eight-vaned media structure for treating water.
- f. Perez et al. (5,911,877) discloses an eight-vaned media structure for treating water.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Prince whose telephone number is (703) 306-9169. The examiner can normally be reached on Monday through Friday from 7:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. David Simmons, can be reached on (703) 308-1972. The fax phone number for this Group is (703) 305-7718.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.



**David Simmons**  
Supervisory Patent Examiner  
Art Unit 1724

F<sup>P</sup>  
Fred Prince  
September 28, 1999